

Abstract

Disclosed are treatment agents and methods of treatment utilizing the agents directed toward diseases in which the disease causing pathogen includes $\alpha 6\beta 1$ integrin receptors and/or $\alpha 6\beta 4$ integrin receptors on the surface of the pathogen. In one embodiment, the disease can be breast cancer. The therapeutic agents disclosed include a polypeptide comprising at least a portion of the G domain of the laminin-5 $\alpha 3$ chain that has been shown to bind $\alpha 6\beta 1$ integrin receptors and $\alpha 6\beta 4$ integrin receptors. In one embodiment, the therapeutic agents can be fused or chimeric materials in which the laminin-5 $\alpha 3$ chain polypeptide has been chemically bound to another material that can be useful in the destruction or neutralization of the pathogen.